

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 Claim 1 (previously presented): A simulation method
2 of analyzing electromagnetic interference developing in an
3 LSI, comprising:

4 a correction step of correcting the amplitude of a
5 current estimation waveform in each simulated node which
6 has been previously prepared for each change in each
7 simulated node, in accordance with the probability of
8 variation in each simulated node;

9 an addition step of adding current waveforms of all
10 simulated nodes together within a period of time
11 corresponding to one cycle, provided that the thus-
12 corrected current waveform appears at time a signal arrives
13 at each simulated node; and

14 a frequency analysis step of analyzing the frequency
15 of the current waveform calculated in the addition step.

1 Claim 2 (previously presented): The method of
2 analyzing electromagnetic interference developing in an LSI
3 according to claim 1, wherein the correction step includes
4 a step of correcting the amplitude of a current estimation
5 waveform, which has been prepared for each change in each

6 simulated node, in accordance with the probability of
7 variation in each simulated node and a distribution with
8 respect to time.

1 Claim 3 (previously presented): The method of
2 analyzing electromagnetic interference developing in an LSI
3 according to claim 1, wherein each simulated node has a
4 plurality of signal transmission paths (hereinafter
5 referred to simply as "paths"), and each of the current
6 waveforms is calculated in consideration of a case where
7 each of the paths has a unique probability of change and
8 signal arrival time.

1 Claim 4 (previously presented): The method of
2 analyzing electromagnetic interference developing in an LSI
3 according to claim 2, wherein each simulated node has a
4 plurality of paths, and each of the current waveform is
5 calculated in consideration of a case where each of the
6 paths has a unique probability of change and signal arrival
7 time.

1 Claim 5 (previously presented): A method of analyzing
2 electromagnetic interference developing in an LSI, the
3 method comprising:
4 a waveform formation step of forming a current
5 estimation waveform which has been prepared for each change

6 in each simulated node, as if the waveform randomly arises
7 within a plurality of predetermined cycles, in accordance
8 with the probability of change in each simulated node and
9 a time at which a signal arrives at each simulated node;

10 adding the thus-prepared current estimation waveforms
11 of all simulated nodes, to thereby derive a current
12 waveform; and

13 analyzing the frequency of the current waveform,
14 thereby determining a noise characteristic of EMI.

1 Claim 6 (previously presented): The method of
2 analyzing electromagnetic interference developing in an LSI
3 according to claim 5, wherein each simulated node has a
4 plurality of paths, and a current waveform is calculated in
5 consideration of a case where each of the paths has a
6 unique probability of change and signal arrival time.

1 Claim 7 (previously presented): A method of analyzing
2 electromagnetic interference developing in an LSI, the
3 method comprising:

4 a waveform formation step of forming a current
5 estimation waveform which has been prepared for each change
6 in each simulated node, as if the waveform randomly arises
7 within a plurality of predetermined cycles, in accordance
8 with the probability of change in each simulated node and
9 a distribution probability of time;

10 adding the thus-prepared current estimation waveforms
11 of all simulated nodes, to thereby derive a current
12 waveform; and
13 analyzing the frequency of the current waveform,
14 thereby determining a noise characteristic of EMI.

1 **Claim 8 (previously presented):** The simulation method
2 of analyzing electromagnetic interference developing in an
3 LSI according to claim 7, wherein each simulated node has
4 a plurality of paths, and a current wave form is calculated
5 in consideration of a case where each of the paths has a
6 unique probability of change and signal arrival time.

1 **Claim 9 (new):** A simulation method of analyzing
2 electromagnetic interference developing in an LSI,
3 comprising:

4 a correction step of correcting the amplitude of a
5 current estimation waveform in each simulated node which
6 has been previously prepared for each change in each
7 simulated node, in accordance with the probability of
8 variation in each simulated node;

9 an addition step of adding current waveforms of all
10 simulated nodes together within a period of time
11 corresponding to one cycle, provided that thus-corrected
12 current waveform appears at time a single arrives at each
13 simulated node.

1 Claim 10 (new): A simulation method of analyzing
2 electromagnetic interference developing in an LSI,
3 comprising:

4 a correction step of correcting the amplitude of a
5 current estimation waveform in each simulated node which
6 has been previously prepared for each change in each
7 simulated node, in accordance with the probability of
8 variation in each simulated node;

9 an addition step of adding current waveforms of all
10 simulated nodes together within a period of time
11 corresponding to one cycle, provided that thus-corrected
12 current waveform appears at time a single arrives at each
13 simulated node; and

14 a voltage-Drop analysis step of analyzing the Voltage-
15 Drop of the current waveform calculated in the addition
16 step.

1 Claim 11 (new): A simulation method of analyzing
2 electromagnetic interference developing in an LSI,
3 comprising:

4 a correction step of correcting the amplitude of a
5 current estimation waveform in each simulated node which
6 has been previously prepared for each change in each
7 simulated node, in accordance with the probability of
8 variation in each simulated node;

9 an addition step of adding current waveforms of all
10 simulated nodes together with a period of time
11 corresponding to one cycle, provided that thus-corrected
12 current waveform appears at time a single arrives at each
13 simulated node; and
14 a power consumption analysis step of analyzing the
15 power consumption of the current waveform calculated in the
16 addition step.